

## RCL101D Digital Bridge User Manual

Plug the test lead into the instrument. Two test clamps respectively clamp the two pins of the component to be tested, and all four poles must contact the component pins.

- **Power on:** Press the PWR/Fn button and release it to power on
- **Shutdown:** Press and hold the PWR/Fn button until the shutdown prompt appears. After releasing it, the instrument will shut down.

- **Calibration:**

The instrument needs to be calibrated after each startup to deduct the internal resistance, inductance, and distributed capacitance of the test fixture. Each frequency must be calibrated. The calibration parameters are not saved, and the calibration must be recalibrated next time it is turned on.

**Calibration method:** short press the CLR key, the screen displays the calibration icon, and enters the calibration mode.

There are components to be tested in, please remove them. After waiting for the reading to be relatively stable, short press the CLR key again to exit the calibration mode.

- **Measurement of resistance:**

The instrument defaults to the resistance measurement function when it is turned on. The LCD screen displays "TYPE R" at the bottom left corner. If "TYPE R" is not displayed, you need to press the R/C/L button on the control panel to switch to "TYPE R". Measure the resistance value. If the main parameter area (upper left corner of the screen) displays --H-- or --L--, it means that the measured resistance exceeds the current maximum range or is less than the current minimum range. If it displays ----, it means the test result is negative or invalid. The display of capacitance and inductance is similar to this meaning.

- **Capacitance measurement:**

Before measuring the capacitance, it is necessary to short-circuit the two poles of the capacitor and discharge it. If "TYPE C" is not displayed in the lower left corner of the LCD screen, you have to

press the R/C/L button on the control panel to switch to "TYPE C", and the system will automatically select the appropriate range for measurement. , The capacitance value is displayed in the main parameter area.

- **Inductance measurement:**

If "TYPE L" is not displayed in the lower left corner of the LCD screen, you need to press the R/C/L button on the control panel to switch to "TYPE L". The system automatically selects the appropriate range for measurement, and the inductance value is displayed in the main parameter area.

- **Frequency selection:**

If you need to select the test frequency, please press the **FREQ** button (frequency selection button) to select the appropriate measurement frequency. This instrument supports 100Hz, 1KHz, and 10KHz frequencies.

- **Series and parallel mode selection:**

After the machine is turned on, it defaults to S (series) mode. Long press P/S to switch to P (parallel) mode. The bottom line of the screen will display the corresponding S or P prompt, and the icon also displays the equivalent circuit model of the corresponding mode.

- **Automatic shutdown:**

If there is no key operation for a long time, the instrument will give a buzzer warning within 20 minutes. If there is still no key operation, The instrument beeps once again and will automatically shut down later to save power consumption.

- **Charging:**

If the battery power is too low, the instrument will automatically shut down, please do not turn it on again.

Please fully charge the supporting charger before turning it on

**Parameter meaning:**

**Rs:** Series equivalent resistance **Rp:** Parallel equivalent resistance **D:**

**Loss Q:** Quality factor

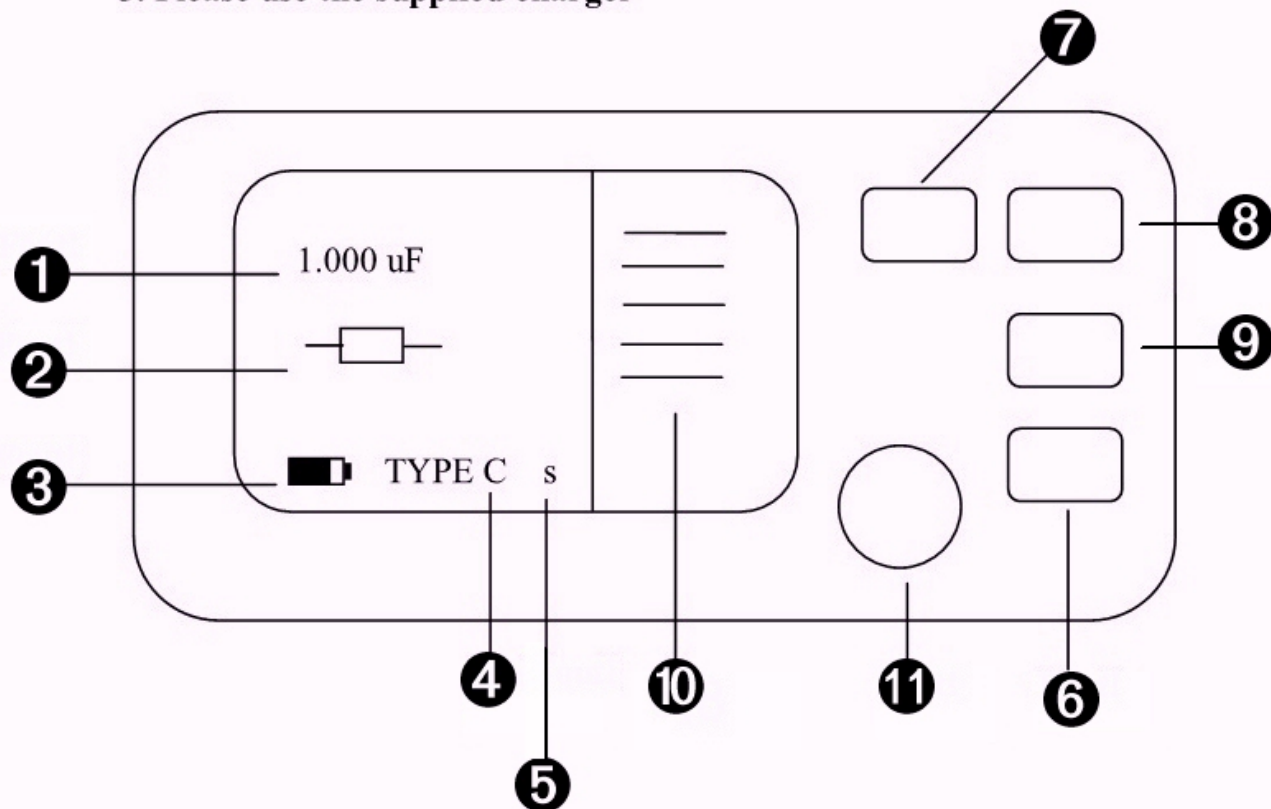
**Z:** total impedance  $\theta$  : phase angle

**S: Series mode P: Parallel mode**

**! Note: 1. Be sure to discharge before measuring capacitance. 2.**

**Calibrate before use**

**3. Please use the supplied charger**



**1** 主参数 Main Parameters

**2** 等效模型 Equivalent Circuit

**3** 电池 Battery

**4** 元件类型 Component Type

**5** 等效模式 Equivalent mode

**6** 模式/校准 按钮 Mode Selecting  
or Calibrating Button

**7** 电源按钮  
Power Button

**8** 元件选择按钮  
Component Select Button

**9** 频率按钮  
Frequency Button

**10** 副参数区  
Secondary Parameters

**11** 测试夹具插座  
Testing Socket